

REMARKS

Summary

Claims 1-29 were pending. Claims 30-37 have been added, Claims 8 and 15 amended, and Claims 4, 6, 9-11, 13, 16-20, 25 and 28 cancelled. No new matter has been added as a result of this amendment.

Claim Rejections

Double Patenting

Claims 1-20 were rejected under the judicially created doctrine of obvious-type double patenting as being unpatentable over Claims 1-11 of U.S. Patent 6,735,645 ("the '645 patent"). The Examiner has stated that the claims are not identical, but are not patentably distinct because the claimed features are shown in the '645 patent. Applicants traverse the rejection as the claims in the instant application must be compared to the claims in the '645 patent, rather than the disclosure in the '645 patent (if the claims in a child application were applied to the disclosure of a parent application, every child application would require a terminal disclaimer to be patentable over the parent application).

35 U.S.C. § 103(a)

Claims 1-29 were rejected under 35 U.S.C. § 103(a) as being unpatentable over Applicant's Admitted Prior Art (AAPA) in view of Hazebrouck (US 6,268,588).

Applicants traverse the rejection.

Regarding the Examiner's rejections, AAPA discloses a rotary connector having a stationary and movable housing along with a flexible cable. AAPA does not anticipated or suggest the use of, or obviously positioning of, a temperature detector. Nor does AAPA anticipate or disclose other specific limitations found in the claims.

The Examiner cites Hazebrouck as generally teaching the use of a temperature detector in a steering wheel and further states although Hazebrouck does not disclose any specifics about the placement of the temperature detector with respect to the other components of the rotary connector, it is a mere matter of design choice where to place the temperature detector.

Applicants respectfully submit that this just simply is not the case. Applicants have disclosed some of the problems inherent in conventional steering wheels, and have not only added a temperature detector, but also have determined a particular location to mitigate these problems. Hazebrouck, as discussed in more detail below, does not even recognize the specific problems discussed by Applicants, and thus at the very least it cannot merely be a matter of design choice to place the temperature detector to mitigate problems that Hazebrouck never discussed.

However, besides the placement of the temperature detector, there are also a number of elements in the claims that are not present in or suggested in the cited references e.g. the holding member or pressing member. Neither the placement of the temperature detector nor the existence of other elements can simply be waved away as being a mere matter of design choice. It is axiomatic that to assert a *prima facie* case of obviousness each and every element in the rejected claims must be taught by the references or otherwise within the capabilities of one of ordinary skill in the art. However, in the present rejection, not only are elements not present in the cited references, but in addition, no evidence has been provided to show that the arrangements recited in the claims are merely a matter of design choice or within the capabilities of one of ordinary skill in the art.

Beyond these facts, Hazebrouck discloses the use of a temperature detector to generally detect the temperature of a vehicle steering wheel. However, Hazebrouck does not specifically anticipate or suggest using a temperature detector to detect the temperature specifically of a flexible cable of a rotary connector in the

steering wheel. In fact, Hazebrouck teaches away from providing a detector in contact with the cable, instead teaching that the temperature detector is preferably embedded within, and thus integral with, the steering wheel (col. 2, lines 43-47).

Nor does any motivation exist to combine the rotary connector disclosed in AAPA with the steering wheel temperature detector disclosed in Hazebrouck. AAPA has a number of specific problems, among them the fact that additional current cannot flow through the cable without causing defects in the cable (such as melting the insulation) and thereby affecting the functionality of the cable and connected devices. Hazebrouck, on the other hand, is directed towards an arrangement in which a clockspring wiring assembly heats the wheel and a temperature detector detects the temperature of the steering wheel, not the cable. Hazebrouck's motivation is to eliminate the "slip ring" in conventional arrangements thereby decreasing excessive noise and costs associated with the slip ring. In other words, no motivation exists in Hazebrouck to overcome the problems inherent in AAPA and provide an arrangement to detect the temperature of the flexible cable quickly and easily as well as minimizing the space used by the detector.

Thus, even if the claimed invention were within the capabilities of one of ordinary skill in the art, no motivation has been provided to combine the teachings of Applicants' admitted prior art and Hazebrouck (see, e.g. MPEP 2143.01). Moreover, if the Examiner is relying on the use of Applicant's disclosure to provide motivation where to place the temperature sensor in light of the problems disclosed, this constitutes an impermissible used of hindsight (MPEP 2141.01, p.2100-116).

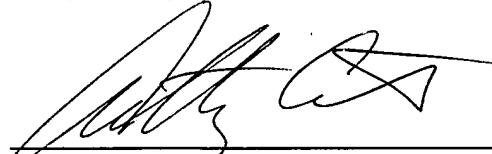
Thus, Applicants submit that 1) the references do not anticipate or suggest the arrangements recited in the pending claims; 2) there is no motivation to incorporate the rotary connector of Applicants' admitted prior art with the steering wheel temperature detector of Hazebrouck; and 3) even if motivation exists, none of the references cited by the Examiner discloses the specific arrangements recited in the pending claims containing all of the limitations thereof.

For at least these reasons, new Claims 30-37 are also patentable over the cited references.

Conclusion

For at least the reasons given above, the Applicants respectfully submit that the application is in condition for allowance and request that a Notice of Allowance issue. The Examiner is respectfully requested to contact the undersigned in the event that a telephone interview would expedite consideration of the application.

Respectfully submitted,



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